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10/041,743	01/10/2002	Scott James Weaver	9288 (3225-130)	3989

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EXAMINER
VU, TUAN A

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)	
	10/041,743	WEAVER, SCOTT JAMES	
Office Action Summary	Examiner	Art Unit	
	TUAN A. VU	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>28 January 2009</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>17-33</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>17-33</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage

        application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to the Applicant's response filed 1/28/09.

As indicated in Applicant's response, no claims have been amended. Claims 17-33 are

pending in the office action.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making
> and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it
> pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode
> contemplated by the inventor of carrying out his invention.

3.   Claims 17-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with

the written description requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to reasonably convey to one skilled in the relevant

art that the inventor(s), at the time the application was filed, had possession of the claimed

invention.

Specifically, claim 17 and 25 recites 'creating a third model … in a data wedge by

integrating the first schema and the second schema into a data wedge'; and according to using a

data wedge instantiating a model data, represented as a tree visible to a respective user based on

the user's schema individually submitted by the respective user, it is not recognized from the

Specifications that a act of <u>integrating 2 schemas</u> takes place to yield a third model as recited.

The tree view instance (see Specifications: Fig. 1, para 0023,pg 6) to correspond to each user

schema (data view A, view B) clearly describes that W3C content of schema is converted into a

separate view visible to the respective user (see Specifications: own data model – para 0027, pg.

8; separate views – para –30, pg. 8; para 0033, pg. 9) according to his/her own provision of a

model (schema A, schema B – Fig. 1). Thus, schema model A and schema model B are not

deemed integrated into a view that have integrated content (emphasis added) of the 2 models.

The *third model* being a result of an <u>integration</u> - integrating schema A **and** schema B - is

deemed not in possession of the Inventor when the invention was made. One cannot make use of

the so-recited integration step (to form a third model), when there is no clear teaching enabling

for this step so to obviate one of ordinary skill to apply undue experimentation. The Wedge is a

physical environment or common tool whereas client's provided input thereto can be returned as

DOM type instance as disclosed (middle pg. 7; bottom pg. 11) and this tree view amounts to a

view visible to the client whose schema has been inputted (see Fig. 1) and would enable each

such client to add or modify that particular client-specific view (pg. 8, middle). The term

'integrating' is deemed devoid of substance because the Specifications teach no particular

algorithmic process by which elements of a schema are systematically integrated into the wedge

so that the end result (e.g. tangible view) of this process reasonably conveys combined schema

elements of at least two schema. That is, the Wedge view (or third model) is NOT one with

integrating/merging result from respective schema elements of at least two users. Since no part

in the Disclosure deliberately and explicitly describes that a DOM view (or third model distinct

from first and second model) contains substantially or **all** XML elements <u>coming from at least</u>

<u>two</u> (emphasis added) user's provided schemas. The limitation as to integrate 2 schemas into a

third model, as identified above, will be given no real patentable weight but will be treated as

though the schemas are inputs into the data wedge framework and converted in some organized

data hierarchy visible to the respective user.

4.   Likewise, claims 17, and 25 fail to comply with the written description requirement.

Specifically, claims 17 and 25 recite: 'creating a first schema ... ; creating a second schema ...'.

According to the Specifications, the data wedge receives schemas from users (see schema A, B -

Fig. 1) and there is not a description therein that explicitly mentions about (the method/system

being claimed as) a software capability to create the schema A or B as mentioned above. The

very act of creating schema --prior to this schema is converted into a third model as claimed -- is

not supported by a single description in the entire disclosure so to convey that the inventor

actually possesses an established utility or programmatic means that would <u>explicitly perform</u>

this creation as claimed. The inventor is not deemed in possession of a capability (with respect

to the context of claims 17, 25) to create schemas prior to submitting these schemas into the data

wedge environment, simply because schemas coming from (or generated by) users cannot be

construed as work being done by the invention. The *creating* a first schema and second schema

as identified above will be treated as receiving schema representing model associated with that

schema.

Claims 18-24, 26-31 do not remedy to the above lack of support from the Disclosure,

hence will be rejected for lack of proper description.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
patent by another filed in the United States before the invention by the applicant for patent, except that an
international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
subsection of an application filed in the United States only if the international application designated the United
States and was published under Article 21(2) of such treaty in the English language.

6.   Claims 17, 19, 21-25, 28-32 are rejected under 35 U.S.C. 102(e) as being anticipated by

Worden, USPuBN: 2003/0149934 (hereinafter Worden).

       As per claim 17, Worden discloses a computer-implemented method of storing and

translating data between a format of a first data model of a first software component and a format

of a second data model of a second software component, the method comprising:

       creating a first schema comprising the first data model of the first software component;

creating a second schema comprising the second data model of the second software component (

Schema (1) Schema (2) – Fig. 9 Note: receiving schema reads on schemas being created by the

sender – refer to USC 112, 1st para Rejection);

       creating a third data model and a data storage in a data wedge by integrating the first

schema and the second schema into the data wedge (see Fig. 9 - Note: using XMulator to map

model to XML for 2 intended languages reads on first and second integration of respective

model schema into the wedge or third model – see para 0029-0035, pg. 2-3; stored …

intermediate file - para 0038, 0040 - pg. 3);

       receiving a data element in the format of the first data model of the first software

component, translating the data element from the format of the first data model of the first

software component to the format of the third data model in the data wedge and storing the

translated data element in the data storage, by the data wedge (e.g. para 0038, 0040 pg. 3; para

0063, pg. 5); and

       retrieving the data element from the data storage and translating the data element into the

format of the second data model of the second software component by the data wedge (e.g.

language 1, language 2 – para 0034-0035, pg. 3; *a new XML comes along … adapted for the*

new language - para 0070, pg. 5; para 0039, pg. 3) after receiving a request for the data element

from the second software component.

       As per claim 19, Worden discloses reading the data element translated into the format of

the second data model by the second software component (e.g. *converts from class model back to*

language 2 – para 0035, pg. 3; para 0039, pg. 3).

       As per claims 21-22, Worden discloses creating an instance of the data wedge (e.g. Fig.

12 – Note: each session per application or agent with login reads on instance) ; wherein the first

and second schemas further comprise a name of the data wedge (e.g. XMulator Ltd 2000, Fig.

12).

       As per claim 23, Worden discloses wherein integrating the first schema into the data

wedge includes setting default data elements and data values for the first data model (e.g. *empty*

map tree ... basic tree – para 0473, pg. 25 – Note: basic tree reads on default value for first data

model; para 0085-0094, pg. 6; Fig. 17, 20-23 – Note: purchase model to be implemented with

W3C template form of a extensible language **reads on** W3C/XML basic format having default

and values to be extended with associations or relations from a UML, during the session wherein

first software component data are integrated into the XMulator) of the first software component.

       As per claim 24, Worden discloses retrieving the data element from the data storage

(*database* - para 0436-0439, pg. 24) and translating the data element from the format of the third

data model to the format of the first data model of the first software component by the data

wedge (e.g. para 0028-0029, pg. 2; para 0037, pg. 3) after receiving a request for the data

element from the first software component (e.g. bridge between meaning and structure ... for

each XML language he uses, language designer – para 0061, 0063pg. 5 – Note: language

designer submitting his XML-based design in order to obtain model structure and mappings

reads on data wedge transforming XML into model mappings upon developer request – see

takes as an input a document ... such as DOM ... answering the query – para 0044, pg. 4).

      As per claim 25, Worden discloses a computer system for translating data between a

format of a first data model of a first software component and a format of a second data model of

a second software component (e.g. para 0034, 0035, 0039, pg. 3), the system comprising: a

processor; and a memory coupled to said processor, the memory having stored therein data and

sequences of instructions which, when executed by said processor, cause said processor to:

      create a first schema comprising the first data model of the first software

component; create a second schema comprising the second data model of the second software

component (refer to claim 1);

      create a third data model and a data storage in a data wedge by integrating the first

schema and the second schema into the data wedge (refer to claim 1);

      receive a data element in the format of the first data model of the first software

component, translate the data element from the format of the first data model of the first software

component to a format of the third data model in the data wedge and store the translated data

element in the data storage (refer to claim 1); and

      retrieve the data element from the data storage and translate the data element into the

format of the second data model of the second software component after receiving a request for

the data element from the second software component (refer to claim 1).

      As per claim 28, refer to claim 21.

      As per claim 29, refer to claim 24

As per claim 30, refer to claim 22.

As per claim 31, refer to claim 23.

As per claim 32, Worden discloses a computer system for translating data between a format of a data model of a first software component and a format of a data model of a second software component (refer to claim 25), the system comprising:

a processor; and a memory coupled to said processor, wherein said processor is configured to execute a sequence of instructions contained in said memory, the instructions comprising

a data wedge (e.g. XMulator - Fig. 12, 14-71) including a first schema of the first software component and a second schema of the second software component (XML ... first language ... second language – para 0033-0035, 0039, pg. 3),

the data wedge configured to translate a data element from the format of the data model of the first software component in accordance with the first schema to a data model of the data wedge (para 0038, 0040 pg. 3; para 0063, pg. 5; *first XML based language .. XML logical structures ... information model* – para 0039, pg. 3) and

when a request is received from the second software component, translate the data element from the format of the data model of the data wedge to the format of the data model of the second software component in accordance with the second schema (e.g. *language 1, language 2* – para 0034-0035, pg. 3; *a new XML comes along ... adapted for the new language* - para 0070, pg. 5; para 0039, pg. 3).

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) a patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

8.   Claims 18, 20, 26-27, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Worden, USPuBN: 2003/0149934.

As per claim 18, Worden does not explicitly disclose triggering an event to notify the

second software component of the availability of the data element received from the first

software component and stored in the data wedge. Worden discloses GUI interface to return

mapping results to user, making it visible to all users (see Fig. 31, 74, 75, 78-80 – Note: Gui

depicting mapping returns **read on** event visible to users; *data source ... visible to all users* –

Fig. 74 ;Fig. 32-35; Fig. 38-52). Based on Gui events and notification of results made available

to all users, the concept that another user (pertinent to second software component) being

informed from availability of mappings results from processing XML source based on database

queries is disclosed. It would have been obvious for one skill in the art at the time the invention

was made to implement the Gui interface by Worden, so that notification of available mappings

from a first software component (or first user) would be implemented by as trigger in the GUI by

Worden, thereby enabling immediate information availability to other user (second software

component) as suggested above, for enabling users pertinent to the second software component

to make use of the mappings and incorporate its into their application in another language (see

para 0035, pg. 3; *sets of mappings ... document in the first XML based language ... to be*

translated ... to a document in the second XML based language ... for the two languages – para

0039, pg. 3).

        As per claim 20, Worden does not explicitly disclose: removing an obsolete data element

from the first data model of the first software component and causing the data wedge to remove

the translated data element from the third data model. However Worden discloses agent and user

paradigm wherein the XMulator provides MDL, XML-to-XML mappings as displayed results;

and transformation into XSLT to return to the user of the second software component using the

XMulator tool (see para 0260 to para 0264 – pg 14-15; Fig. 9; Fig. 54-56; para 0842-0858, pg.

37-38) including removing of mappings data (see *delete* button – Fig. 29-31; para 0564, pg. 29;

para 0720, pg. 34). It would have been obvious for one skill in the art at the time the invention

was made to implement the agent and the XMulator interface in Worden so that in the (third

model) mappings interface, the Gui-implemented delete/remove function would be for removing

a XML component mappings as in removing of an obsolete data element in the XML of the first

software component using the wedge created third model as set forth in the mappings displayed

above, to enhance correctness of the model with more updated mappings.

        As per claims 26-27, refer to the rationale of claims 18, 20.

        As per claim 33, refer to the rationale as set forth in claim 18.

                                    Response to Arguments

9.   Applicant's arguments filed 1/28/09 have been fully considered but they are not

persuasive. Following are the Examiner's observation in regard thereto.

        USC § 112, 1ˢᵗ Rejection:

(A)   The Applicant has submitted that (Appl. Rmrks pg. 7-8) the rejection is traversed because

as data from multiple clients (para 27, para 43 of the Specifications) are managed as a single data

structure by way of the Wedge, the wedge by having data model inserted necessarily clearly

shows that it is integrating data and schemas to create a new single data structure; such that this

single structure contains generated tags whose actual content is supplied by the client

components (unique model containing all the data supplied by all its clients).   Pleading that the

new single structure is *integrating* all the content coming from all clients would not be equated

(nor can it substitute) to the real teachings gathered from the Specifications. The virtual structure

or view (para 0031, pg. 8) as disclosed or the internal view document (para 0043, pg. 11)

supports the Wedge utilization in terms of the Wedge returning (after receiving a client schema)

structure instance accessible to that one client in a separate view (see para 0030) where local

names are instantiated for that client (see *different view* - para 0023, pg. 6); whereas any

possibility to add or populate such user-specific view (*populates its data model* - para 0040, pg.

10) reinforces that the fact that the viewed client model structure (or even the internal *view*

document para 0043) is not a integration result of all schemas coming from all users or clients. It

would have been <u>chaos</u> if data common to a multitude of schemas (as in an integrated view) are

made accessible/available for asynchronous or simultaneous modification by a contentious

amount of clients (as in concurrent threads) based on the above client-per-client customization

approach. The disclosure does not provide a mechanism regarding synchronizing separate

client's threads that would attempt to modify a common view if this common view or new

unique structure -- as argued above-- has integrated within itself all schemas belonging to all the

connected clients, whereby giving them all computer interface accessibility (see para 0046-0047)

to freely modify data as per their respective modeling instance(s). It should be clear that the
model view having internal forming of tagged elements (para 0043) amounts to just the
translated instance of XML elements for a particular user only, even though the wedge is a
physical tool for share or store, one same model view is **not** simultaneously shared (see separate
views – para 0030, pg. 8; *provides a different view … to every client or component* – para 0023,
pg. 6) nor it is an integrated view combining all schema elements from all clients, and accessible
in that form to all. The 'third model' recited as being an integration model (for at least two
schemas) is not deemed supported by a proper description; and the rejection is maintained.

(B)   Applicant has submitted that software component is disclosed as part of the client/server
architecture, and software component stands for a client component (Appl. Rmrks pg. 9); thus,
the office's contention that there is no creation step to create a *schema* is traversed, because
client component is disclosed as 'must first create a schema describing its own logical model'
(para 0037, pg. 10). The purpose for establishing whether the inventor is clearly in possession of
a feature or functional means is based on reading the claim in light of the explicit description
therefor in the entire Disclosure. The Wedge as disclosed is perceived as a tool common to
accessing clients, wherein input data from respective clients is translated into a instance of
structure for the localized accessibility (via standard computer interface- para 0046-0047) of the
respective client in this client's endeavor to modify and populate (via the Wedge) a local
instance of a view (see: *Wedge exposes fixed compile time interfaces for clients to use* – para
022, pg. 6). The client here is understood a online user that operates a instance of this Wedge
tool via an interface enabling this user to modify a view or customize the model in terms of
transaction with related XML medium transported on a point-of-sale network (see kiosk – para

0006, pg. 2). This user should create his or her version of XML schema (see para 0037) and

user' creating of a XML regarding a transaction online amounts to a feature not possessed by the

inventor. The inventor cannot support creating of a XML schema done by one human having a

connecting session with the Wedge to customize his/her online transaction using a GUI tool.

The Specifications appears to ignore the alternate language interchanging *client* and *client*

software, such that there is no real discrimination between a *software component* and a *client*

component and a *client*. Based on the customization prerogatives given to a given user to see a

view via computer standard input means (see para 0040-0041, pg 11; para 0046-0047) and

modify its data according to the user's model, the client's creating a schema belongs to a human

achievement or act. Human creation (i.e. *the client that uses the Wedge must first create a*

schema) while using the Wedge is not an action achieved by the Wedge itself; the inventor (of

this Wedge) is not deemed in possession of a capability as to create (on behalf of users within the

point-of-sale context and online sale transaction) schema for the client, necessarily when the

Specifications specify that schema creating would be necessarily coming from the client. The

argument is largely non persuasive; and the rejection will be maintained. The 'creating'

limitation is not supported by established means provided by the inventor.

Prior Art (§ 102/103) Rejection:

(C) Applicant has submitted that Worden is not shown as disclosing (or suggesting) "creating

a third data model and a data storage … by integrating the first schema and the second schema

into the data wedge" (Appl. Rmrks pg. 10). The limitation has been interpreted in light of the

claim language and the USC 112 Rejection; thus, since the arguments against the USC 112

Rejection are deemed insufficient (as set forth in sections A, B) , the cited parts in Worden are

deemed fulfilling the claim language. Applicant's arguments fail to comply with 37
CFR 1.111(b) because they amount to a general allegation that the claims define a patentable
invention without specifically pointing out how the language of the claims patentably
distinguishes them from the reference.

In all, the claims stand rejected as set forth in the Office Action.

Conclusion

10.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time
policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE
MONTHS from the mailing date of this action. In the event a first reply is filed within TWO
MONTHS of the mailing date of this final action and the advisory action is not mailed until after
the end of the THREE-MONTH shortened statutory period, then the shortened statutory period
will expire on the date the advisory action is mailed, and any extension fee pursuant to 37
CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,
however, will the statutory period for reply expire later than SIX MONTHS from the mailing
date of this final action.

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Tuan A Vu whose telephone number is (571) 272-3735. The
examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Lewis Bullock can be reached on (571)272-3759.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3735 (for non-official correspondence - please consult Examiner before using) or 571-273-8300 (for official correspondence) or redirected to customer service at 571-272-3609.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tuan A Vu/

Primary Examiner, Art Unit 2193

April 02, 2009